Remarks

I. Status of claims

Claims 1-52 were pending.

Previously withdrawn claims 11-21 have been canceled without prejudice.

Claims 1-10 and 41 have been allowed.

The Examiner has indicated that claims 24-27, 29, 30, 33-36, 38-40, 42, 43, 49, 50, and 52 would be allowable if rewritten in independent form.

II. Rejection of claims

The Examiner has rejected claims 22, 23, 28, 31, 32, 37, and 44-48 under 35 U.S.C. § 102(b) over Egawa (U.S. 5,138,460).

Egawa discloses an apparatus for forming composite images. The apparatus includes a control device that allows a display device 3 to simultaneously display respective portions of an image to be photographed (frame n+1) and a previously captured image (frame n). The size or area of the image of the previously captured image that is displayed may be varied by scrolling the images progressively by means of the scroll switch buttons 4, 5 (see col. 4, lines 25-39).

In a rightward panorama mode of operation, a user presses the right scroll switch button 5 to set the rightward portion of frame n and the leftward portion of frame n+1 that are displayed in the display device 3 (see FIGS. 3(a) and 4(a)). In a leftward panorama mode of operation, a user presses the left scroll switch button 4 to set the leftward portion of frame n and the rightward portion of frame n+1 that are displayed in the display device 3 (see FIGS. 3(b) and 4(b)). The scroll switch buttons 4, 5 control the up-counting and down-counting by an address difference counter 720, which produces an output value that is used as the amount of scroll ("i.e., the value of offset of the juncture between the image on the n-th frame and the image on the (n+1)th frame" (col. 5, lines 28-30); see FIG. 7). "A direction detecting device 728 detects the direction of the scroll so as to determine whether the image on the n-th frame is to be displayed on the right side or the left side of the display area of the display device 410" (col. 5, lines 30-34).

A horizontal address counter 718 and a vertical address counter 717 respectively set the horizontal and vertical addresses of the captured images that are to be read out from the n-frame RAM 704 (see col. 4, lines 51-64, and FIG. 7). A horizontal address counter 721 and a vertical address counter 722 respectively set the horizontal and vertical addresses of the display locations on the display device 3 (see col. 5, lines 54-57, and FIG. 7). According to Egawa (col. 4, lines 51-64; see FIG. 7):

> The vertical transfer clock pulses ϕV for the imaging device 401 are counted by a vertical address counter 717 so as to transfer the vertical addresses to the imaging device 401 and to the RAMs 703 to 705. The counter 717 is adapted to be reset by a vertical blanking signal VD when a predetermined number of transfer clock pulses φV have been counted. Similarly, the horizontal transfer clock pulses φH for the imaging device 401 are counted by a horizontal address counter 718 so as to transfer the horizontal addresses to the imaging device 401 and to the RAMs 703 to 705. The counter 717 is adapted to be reset by a horizontal blanking signal HD when a predetermined number of transfer clock pulses φH have been counted.

The portions of the image to be photographed (frame n+1) and the previously captured image (frame n) that are displayed in the imaging device 3 are determined by a phase control device 405, which is responsive to the user's selection of the scroll switch buttons 4, 5.

A. Claims 22, 23, and 28

Claim 22 is an independent claim. Claims 23 and 28 depend from claim 22. Claim 22 recites:

> 22. A process for a camera having a display, comprising:
>
> sensing motion of the camera;
>
> interpreting sensed motion of the camera as a user interface input; and
>
> presenting on the display images superimposed on a scene viewed though the camera in accordance with the interpreted user interface input.

With respect to claim 22, the Examiner has stated his belief that "the value counted by the address counter as an amount of scroll" corresponds to the "sensing motion of the

camera" recited in claim 22. The Examiner has failed to indicate whether he is referring to the imaging address counters 717, 718 or the display address counters 721, 722. In either case, however, "the value counted by the address counter" does not correspond to or otherwise indicate sensed motion of the camera. Indeed, the values counted by the imaging address counters 717, 718 and the display address counters 722, 721 merely correspond to the number of input vertical and horizontal clock pulses (φV, φH) that are received (see col. 4, lines 51-64, and FIG. 7). These vertical and horizontal clock pulses are generated by the imaging system to record the sequential address locations of the captured image data; these clock pulses are generated independently of the motion of Egawa's apparatus.

Moreover, no component of Egawa's apparatus is capable of "sensing motion" of the apparatus. For example, the phase control device 405 (which is implemented by *inter alia* the address difference counter 720, the comparator 719, and the detection of direction circuit 728 in the embodiment shown in FIG. 7) is not capable of sensing motion of the apparatus. Although the phase control device 405 is responsive to the user's selection of the scroll switch buttons 4, 5, such responsiveness does not constitute "sensing motion" of the apparatus. Indeed, the user's selection of the scroll switch buttons merely "enable the photographer to select either a rightward panorama mode of a leftward panorama mode" (col. 3, lines 30-32), where the display offset corresponding to the respective amounts of the previously captured image and the image to be captured that are displayed in the display device 3 may be fixed or may be dynamically varied by the user's selection of the scroll switch buttons 4, 5. In either of these cases, the amount of the display offset is independent of motion of the Egawa's apparatus.

The Examiner has stated his additional belief that the user's input selections through the scroll switch buttons correspond to the "interpreting sensed motion of the camera as a user interface input" recited in claim 22. In this regard, the Examiner appears to believe that one of ordinary skill in the art at the time the invention was made would be motivated by Egawa's teaching to vary the display offset in accordance with motion of the apparatus. Egawa, however, does not teach or suggest anything that would have led such a person to operate Egawa's device in this way. Indeed, such a mode of operation would make the process of forming composite images extremely difficult if not impossible, defeating the object of Egawa's invention.

To summarize, there is no mechanism whatsoever in Egawa's apparatus that is capable of "sensing motion" of the apparatus, nor is there any mechanism for "interpreting sensed motion" of the apparatus as a user interface input.

For at least these reasons, the Examiner's rejection of independent claim 22 under 35 U.S.C. § 102(b) over Egawa should be withdrawn.

Each of claims 23 and 28 incorporates the features of independent claim 22 and therefore is patentable over Egawa for at least the same reasons.

B. Claims 31, 32, and 37

Claim 31 is an independent claim. Claims 32 and 37 depend from claim 31.

Claim 31 recites:

> 31. A camera, comprising:
>
> a display;
>
> a motion sensor configured to sense motion of the camera; and
>
> circuitry configured to interpret sensed motion of the device as a user interface input and to present on the display images superimposed on a scene viewed though the camera in accordance with the interpreted user interface input.

As explained above in connection with claim 22, there is no mechanism whatsoever in Egawa's apparatus that is capable of "sensing motion" of the apparatus, nor is there any mechanism for "interpreting sensed motion" of the apparatus as a user interface input.

For at least these reasons, the Examiner's rejection of independent claim 31 under 35 U.S.C. § 102(b) over Egawa should be withdrawn.

Each of claims 32 and 37 incorporates the features of independent claim 31 and therefore is patentable over Egawa for at least the same reasons.

C. Claim 44

Claim 44 recites:

> 44. A process for a camera having a display, comprising:
>
> sensing motion of the camera;

interpreting sensed motion of the camera as a user interface input; and

presenting images on the display in accordance with the interpreted user interface input, wherein presenting comprises presenting different portions of a virtual panorama in the display in accordance with the interpreted user interface input, wherein the virtual panorama is composed of multiple images captured by the camera.

As explained above in connection with claim 22, there is no mechanism whatsoever in Egawa's apparatus that is capable of "sensing motion" of the apparatus, nor is there any mechanism for "interpreting sensed motion" of the apparatus as a user interface input.

For at least these reasons, the Examiner's rejection of independent claim 44 under 35 U.S.C. § 102(b) over Egawa should be withdrawn.

D. Claims 45-47

Claim 45 is an independent claim. Claims 46 and 47 depend from claim 45.

Claim 45 recites:

45. A process for a camera having a display, comprising:

sensing motion of the camera;

interpreting sensed motion of the camera as a user interface input;

presenting images on the display in accordance with the interpreted user interface input; and

selecting a portion of a scene through the camera based on the interpreted user interface input.

As explained above in connection with claim 22, there is no mechanism whatsoever in Egawa's apparatus that is capable of "sensing motion" of the apparatus, nor is there any mechanism for "interpreting sensed motion" of the apparatus as a user interface input.

For at least these reasons, the Examiner's rejection of independent claim 45 under 35 U.S.C. § 102(b) over Egawa should be withdrawn.

Each of claims 46 and 47 incorporates the features of independent claim 45 and therefore is patentable over Egawa for at least the same reasons.

E. Claim 48

Claim 48 recites:

> 48. A process for a camera having a display, comprising:
>
> sensing motion of the camera;
>
> interpreting sensed motion of the camera as a user interface input; and
>
> presenting images on the display in accordance with the interpreted user interface input, wherein presenting comprises presenting different portions of a virtual panorama in the display in accordance with the interpreted user interface input, wherein the virtual panorama is composed of multiple images captured by the camera.

As explained above in connection with claim 22, there is no mechanism whatsoever in Egawa's apparatus that is capable of "sensing motion" of the apparatus, nor is there any mechanism for "interpreting sensed motion" of the apparatus as a user interface input.

For at least these reasons, the Examiner's rejection of independent claim 48 under 35 U.S.C. § 102(b) over Egawa should be withdrawn.

IV. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Respectfully submitted,

Date: July 25, 2005

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